

Amendments to the Claims

Listing of Claims:

Claim 46 (currently amended): A method for routing calls on a wireless device to a through a discount telephone service provider, comprising:

method for collecting the digits of a dialed phone number by monitoring the keypad of a wireless device to detect electrical signals indicating which buttons were pressed;

method for storing to memory the digits corresponding to the buttons that were pressed on the wireless device keypad;

method for determining whether an outgoing call from a wireless device is a discount call based on analysis of the leading dialed digits of said call;

method for performing said analysis at the wireless device;

~~method for accessing a discount service provider for an outgoing long distance call; and~~

method for transparently dialing the phone access number for a discount telephone service provider and the digits corresponding to said an outgoing long distance call.

Claim 47 (currently amended): The method according to claim 46, further comprising:

~~method detecting the electrical signature for the first predetermined digits dialed on a wireless device keypad~~

method for detecting the electrical signals generated by pressing buttons on a wireless device keypad and determining if the leading digits of a dialed phone number correspond to a predetermined sequence of digits predetermined to be a common to a discountable call;

method for performing said determination, detection, and dialing from an external unit attached to the wireless device.

Claim 48 (currently amended): The method according to claim 46, wherein the determining whether a discount call is made is accomplished by software running on a microprocessor located inside of the wireless device that determining determines whether the leading digits that encode the area code of an outgoing call meets a predetermined sequence of digits.

Claim 49 (currently amended): The method according to claim 47, wherein the determining whether a discount call is made is accomplished by determining whether the leading electrical signals generated by dialing a phone number on the wireless device's keypad encodes for the digit associated with a dialed number is zero the digits associated with an international call.

Claim 50 (currently amended): The method according to claim 47, further comprising:
method for automatically determining whether an access code is required to effectuate routing a call through a discount service provider said routing; and
method for automatically providing said access code when said code is required.

Claim 51 (original): The method according to claim 46, wherein the discount call is an international call.

Claim 52 (original): The method according to claim 46, wherein the discount call is not a special service call, toll free call, or a local call with an area code.

Claim 53 (currently amended): The method according to claim 47, further comprising:

~~method for providing access code for a given discount service provider by electronically mimicking the pressing of keys on a wireless device keypad.~~

method for transparently providing an access code for a discount service provider by generating electrical signals similar to pressing of keys on a wireless device keypad.

Claim 54 (currently amended): A method for routing calls through a discount telephone service using a wireless device, comprising:

monitoring the activity of a cell phone function keys keypad for detecting outgoing call activity;

determining whether the outgoing call is a potential discount call;

determining whether the outgoing call is a potential discount call is accomplished by detecting a predetermined sequence of digits in a predetermine position of the dialed phone number of the outgoing call;

~~detecting the digits of the outgoing call corresponding to a first predetermined number of digits, wherein the determining whether the outgoing call is a potential discount call is accomplished by determining whether the first predetermined number of at least one digit meets a predetermined sequence of the digits;~~

collecting the digits corresponding to the discount call; and

dialing the access phone number for accessing a discount telephone service provider and the digits corresponding to the discount call.

Claim 55 (currently amended): The method according to claim 54, further comprising:

effectuating a re-set state when an after the initial phone number is entered but not dialed sent out over the communication network;
dialing the phone number of the discount service provider; and
dialing the digits of the detected outgoing discountable phone number.

Claim 56 (currently amended): The method according to claim 54, further comprising:

method for determining whether an access code is required to effectuate said routing; and transmitting said access code through a wireless device when said code is required by generating electrical signals similar to mimicking the pressing of keypad buttons corresponding to the digits of the needed code.

Claim 57 (original): The method according to claim 54, wherein the potential discount call is an international call.

Claim 58 (currently amended): A system for automatically routing calls through a discount telephone service using a wireless device, comprising:

a means for determining whether an outgoing call on a wireless device is a potential discount call;

a means for collecting the digits corresponding to the outgoing call by monitoring the wireless device keypad for activity; and

a means for dialing the access number for a discount telephone service provider and the digits corresponding to the outgoing call by generating electrical signals the correspond to the buttons on the keypad in a manner that produces the phone number of the outgoing call and the discount service provider mimicking electronically the pressing of a button that corresponds to a desired digit.

Claim 59 (currently amended): The system according to claim 58, further comprising:

means for determining whether the leading detected dialed digits match a detecting a first predetermined number of DTMF tones in a predetermine sequence that corresponding to a potential ~~discount~~ discountable call.

Claim 60 (currently amended): The system according to claim 59, wherein the means for determining whether a discount call is being made is accomplished by ~~a means for determining~~ detecting the dialed digits as electrical signals from the keypad of the wireless device ~~whether the first predetermined dialed digits and determining whether they meets a predetermined~~ sequence of digits.

Claim 61 (currently amended): The system according to claim 59, wherein the means for determining whether a discount call is being made is accomplished by determining if the first dialed digits are associated with a predetermine sequence of digits of an international phone

number a dialed number is zero.

Claim 62 (currently amended): The system according to claim 59, further comprising:

means for determining whether an access code is required to effectuate said routing; and

means for providing said access code to the discount service provider when said access code is required ~~the wireless device when said code is required.~~

Claim 63 (currently amended): The system according to claim 58, wherein the potential discount call is an international call.

Claim 64 (currently amended): The system according to claim 59, wherein it is determined by the leading dialed digits whether the potential discount call is not a special service call or toll free call.

Claim 65 (currently amended): The system according to claim 59, further comprising:

~~means for choosing the access number among a plurality of access numbers for discount telephone providers;~~

means for selecting a discount service provider phone number and the required access code from a plurality of service provider and their access code; and

~~means for dialing the selected access number of the associated discount telephone provider by mimicking the pressing of keys on the keypad that correspond to the digits of the access~~

number.

means for dialing the selected discount service provider and any required access code by generating electrical signals similar to the pressing of keypad buttons corresponding to the digits of the discount service provider phone number, the dialed phone number, and the access code if required.

Claim 66 (currently amended): A system for routing calls through a discount telephone service, comprising:

means for monitoring a cell phone function keys for outgoing call activity;

means for determining what digits are dialed on a cell phone keypad in the making of an outgoing call;

means for determining whether the outgoing call is a potential discount call;

means for determining whether a predetermine number of the leading dialed digits of said outgoing call are of a known sequence of digits associated with a discountable call; and

~~means for detecting the digits corresponding to a first predetermined number of digits, wherein the determining whether the outgoing call is a potential discount call is accomplished by determining whether the first predetermined number of at least one digit meets a predetermined sequence in the digits;~~

~~means for collecting the digits corresponding to the discount call; and~~

means for routing the outgoing call to a discount service provider by re-setting the phone before dialing the access number for a discount telephone service provider and the digits corresponding to the discount said outgoing call.

Claim 67 (original): The system according to claim 66, further comprising:

means for determining whether an access code is required to effectuate said routing; and
means for transmitting said access code through the cell phone when said code is required.

Claim 68 (original): The system according to claim 66, wherein the potential discount call is an international call.

Claim 69 (original): The system according to claim 66, wherein the potential discount call is not a special call or a toll free call.

Claim 70 (currently amended): A system for routing calls through a discount telephone service using a wireless device, comprising:

a processor configured for identifying electrical signals encoding digits associated with an outgoing telephone number by monitoring activity on the wireless device keypad and storing observed activity in memory;

a processor configured for analyzing one or more of the electrical signals encoding the digits generated by pressing a key on the wireless device keypad, and configured for determining whether a potential discount call is being made;

a memory configured for collecting and storing the dialed telephone number ~~corresponding to the potential discount call~~; and

a processor configured for generating electrical signals corresponding to the phone number

for a discount service provider, an access code if needed, and the outgoing call dialed telephone number.

Claim 71 (currently amended): The system according to claim 70, wherein the processor is further configured for comparing a first predetermined numbers of digits of an outgoing call in order to determine whether the outgoing telephone number is a discount call.

Claim 72 (currently amended): The system according to claim 71, wherein the leading digits of an outgoing call are represented as electrical signals that encodes for the digits that indicate the call is international or long distance the zero digit.

Claim 73 (original): The system according to claim 70, wherein the leading electrical signals of an outgoing call represent the digits that encode an area code of a long distance phone number.

Claim 74 (original): The system according to claim 71, wherein the processor is further configured for determining whether an international phone call is being made prior to the action of a wireless device user convey the dialed phone number to the communication network.

Claim 75 (original): The system according to claim 71, wherein the processor is further configured for determining whether an access code is required to effectuate said routing, and for transmitting said access code stored in memory over the wireless device when said code is required.

Claim 76 (original): The system according to claim 70, wherein the potential discount call is an international call

Claim 77 (original): The system according to claim 70, wherein the potential discount call is not a special type call or toll free call.

Claim 78 (currently amended): The system according to claim 71, wherein a the processor is located in an router located externally to but in communication with a wireless device is further configured for choosing an access number from a plurality of access numbers for a discount service provider, and for dialing the selected access number associated with ~~the~~ a discount service provider, said dialing is effectuated by ~~a chip that generates generating electrical signals that corresponds to the pressing buttons on a wireless device keypad encoding digits corresponding to the access number by mimicking the pressing of key on a wireless device keypad.~~

Claim 79 (currently amended): A system for routing calls through a discount telephone service, comprising:

an array of Pic I/O pins configured for monitoring a cell phone activity for outgoing call, said array comprising of at least one Pic I/O pin;
a DTMF encoder configured for detecting the DTMF tones associated with an outgoing telephone number, a processor configured for determining whether the outgoing call is a discount

call by determining whether the predetermined number of dialed digits comprises a predetermined sequence of ~~at least one or more~~ DTMF tones that ~~is~~ are dialed by a user; a memory configured for storing the telephone number corresponding to the discount call; and a DTMF generator configured for dialing the ~~access~~ phone number for a discount service provider and the outgoing telephone number.

Claim 80 (currently amended): The system according to claim 79, wherein the processor is further configured for determining whether an access code is required to effectuate said routing, and for transmitting said access code over the cell phone when said code is required by ~~mimicking generating electrical signals that encode the digits of said access code the pressing of keys on the wireless device keypad that correspond to said access code.~~

Claim 81 (original): The system according to claim 79, wherein the potential discount call is an international call.

Claim 82 (original): The system according to claim 79, wherein the potential discount call is not a special type call or a toll free call.

Claim 83 (original): The system according to claim 66, wherein a system for routing call to a discount service provider is integrated into a wireless device.

Claim 84 (original): The system according to claim 79, wherein a system for routing call to a

discount service provider is attaches to a wireless device.

Claim 85 (currently amended): Located within a wireless device, computer executable software code stored on a computer readable medium, the code for routing calls through a discount telephone service using said wireless device, comprising:

code for determining whether an outgoing call on a wireless device is a discount call;

code for collecting the digits corresponding to the discount call by monitoring the keypad of a wireless device for activity;

code for dialing the number for a discount telephone service provider and the digits corresponding to the discount call by having a processor capable of storing the dialed phone number in memory and being able to generate electrical signals that matches both the of the discount service provider phone numbers and the outgoing call phone number electronically mimicking the pressing of buttons associated with the digits making up said access number and outgoing call on the wireless device keypad; and

code for providing an access code if needed.

Claim 86 (original): A computer readable medium having computer executable software code stored thereon, the code for automatically routing calls through a discount telephone service using a wireless device, comprising:

code for automatically determining whether an outgoing call on a wireless device is a discount call;

code for collecting the digits corresponding to the discount call by monitoring the keypad

of a wireless device for activity; and

code for dialing the access number for a discount telephone service provider and the digits corresponding to the discount call.

Claim 87 (currently amended): A programmed computer for routing calls through a discount telephone service using a wireless device, comprising:

a memory in a wireless device having at least one region for storing computer executable program code; and

a processor for executing the program code store in said memory, wherein the program code includes:

code for determining from the sequence of the leading digits whether an outgoing call is a discount call;

code for collecting the digits corresponding to the discount call by monitoring the activity of the keypad of the wireless device; and

code for dialing the access number for a discount telephone service provider and the digits corresponding to the discount call by generating the electronic signals that correspond to digits dialed on a wireless device keypad mimicking the pressing of keys on the wireless device keypad.

Claim 88 (currently amended): Computer executable software code stored on a computer readable medium located in a wireless device, the code for routing calls through a discount telephone service, comprising:

code for monitoring the activity of a cell phone keypad a-cell phone for outgoing call activity;

code for determining whether the outgoing call is a potential discount call;

code for detecting the DTMF tones corresponding to a ~~first~~ predetermined number of DTMF tones, wherein the determining whether the outgoing call is a potential discount call is accomplished by determining whether ~~the first predetermined number of at least one or more of a predetermined number of~~ DTMF tone meets a predetermined sequence of the DTMF tones;

code for collecting the digits corresponding to the discount call; and

code for dialing the ~~access~~ number for a discount ~~cell~~ phone service provider and the digits corresponding to the discount call.

Claim 89 (currently amended): A computer readable medium having ~~Computer~~ computer executable software code stored thereon, the

code for routing calls through a discount telephone service, comprising:

code for monitoring ~~a~~ the activity of a cell phone keypad to determine whether an outgoing call is being made ~~cell phone activity for outgoing call~~;

~~code for determining whether the outgoing call is a potential discount call;~~

~~code for determining detecting the DTMF tones corresponding to a first predetermined number of DTMF tones, wherein the determining whether the outgoing call is a potential discount call is accomplished by determining whether the outgoing call contains a predetermined number of DTMF tones in a predetermined sequence the first predetermined number of at least one DTMF tone meets a predetermined sequence of the DTMF tones;~~

code for collecting the digits corresponding to the discount call;
code for determining whether all of the numbers associated with the discount call have been collected within a predetermined polling period; and
code for dialing the access number for a discount telephone service provider and the digits corresponding to the discount call.

Claim 90 (currently amended): A programmed computer for routing calls through a discount telephone service, comprising:

a memory in a wireless device having at least one region for storing computer executable program code; and

a processor in a wireless device for executing the program code stored in memory, wherein the program code includes: code for monitoring a wireless device phone activity for outgoing call;

code for determining whether the outgoing call is a potential discount call;

code for detecting the DTMF tones corresponding to a ~~first~~ predetermined number of DTMF tones, wherein the determining whether the outgoing call is a potential discount call is accomplished by determining whether ~~the first predetermined number of~~ at least one or more DTMF tones meets a predetermined sequence of the DTMF tones;

code for collecting the digits corresponding to the discount call; and

code for dialing the access number for a discount telephone service provider and the digits corresponding to the discount call.